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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

KIM, JENNIFER M

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1617

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/751,056	Applicant(s) DIPIANO ET AL.	
	Examiner Jennifer Kim	Art Unit 1617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-15 and 17-19 is/are pending in the application.
- 4a) Of the above claim(s) 10-15, 17-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 6, 2008 has been entered.

Action Summary

The rejection of claims 1-5 under 35 U.S.C. 112, first paragraph is being maintained for the reasons stated in the previous Office Action.

The rejection of claims 1, 2 and 4-7 under 35 U.S.C. 102(b) as being anticipated by Mauvais-Jarvis et al. (U.S. Patent No. 4,919,937) is being maintained for the reasons stated in the previous Office Action.

The rejection of claims 1-4 and 6-8 under 35 U.S.C. 103(a) as being unpatentable over Ragavan et al. (U.S. Patent No. 5,993,856) is being maintained for the reasons stated in the previous Office Action.

The rejection of claims 1-8 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 and 31-33 of U.S. Patent No. 5,993,856 is being maintained for the reasons stated in the previous Office Action.

The rejection of claims 1-8 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 and 17 of U.S. Patent No. 6,652,874 B2 is being maintained for the reasons stated in the previous Office Action.

The rejection of claims 1-8 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 12 of U.S. Patent No. 6,416,778 B1 is being maintained for the reasons stated in the previous Office Action.

Upon further consideration, additional rejections have made in this Office Action.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Enablement

Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for the “ **a specific drug formulation (e.g. drugs set forth in claims 6-8)** comprising a **penetration enhancer**” (see page 9 C of the specification), does not reasonably provide enablement for the “**a drug formulation comprising a penetration enhancer**”. The specification does not enable any person

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skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims.

2. Enablement is considered in view of the Wands factors (MPEP 2164.01(a)).

These include: nature of the invention, breadth of the claims, guidance of the specification, the existence of working examples, predictability of the prior art, state of the prior art and the amount of experimentation necessary. All of the **Wands factors** have been considered with regard to the instant claims, with the most relevant factors discussed below.

Nature of the Invention: All of the rejected claims are drawn to a drug formulation comprising a drug in an amount effective to provide relief from disease or disorder of the breast in a pharmaceutically acceptable carrier capable of delivering the drug to the breast tissue, comprising a penetration enhancer to promote deliver of the drug across the stratum corneum, wherein the drug is not a non-steroidal anti-inflammatory or analgesic. The nature of the invention is extremely complex in that it encompasses a drug formulation comprising **any drug with any penetration enhancer** that would provide relief from disease or disorders of the breast.

Breath of the Claims: The complex of nature of the claims are greatly exacerbated by breath of the claims. The claims encompass a drug formulation comprising a drug and a penetration enhancer which have potentially many different physical and chemical characteristic compatibility, that need to

considered in a formulation. Each of which may or may not be addressed by the administration of the claimed combinations.

Guidance of the Specification: The guidance given by the specification as to how one would choose a drug or a penetration enhancer to prevent physical/chemical incompatibility is minimal. All of the guidance provided by the specification is directed towards a formulation comprising specific drug and a specific penetration enhancer.

Working Examples: All of the working examples provided by the specification are directed toward a formulation comprising a specific drug and a specific penetration enhancer.

State of the Art: While the state of the art is relatively high a formulation comprising a specific drug and a specific penetration enhancer (i.e. 4-Hydroxytamoxifen and triethanolamine), the state of the art with regard a formulation comprising **a drug with a penetration enhancer** is underdeveloped. In particular, there do not appear to be any examples or teachings in the prior art wherein a formulation similar to the claimed combination. The state of the art, Reed (WO 97/29735) teaches that there is problems with most known dermal penetration enhancers that they are often toxic, irritating or allergenic. Reed further teaches that theses difficulties remains with those dermal enhancers because the problem of irritation at the site of application has not been overcome. Reed further teaches some enhancers are toxic and unsuitable for application for the animal body. (page 3, lines 10-25). Moreover, the

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thermodynamic activity of a drug with vehicles can cause precipitation causing ceases percutaneous absorption. (pages 3-5, particularly, page 4, lines 1-5).

Predictability of the Art: The lack of significant guidance from the specification or prior art with regard to the actual formulation comprising any drug with any penetration enhancer makes practicing the claimed invention unpredictable in terms of a formulation comprising any drug and any penetration enhancer.

The amount of Experimentation Necessary: In order to practice claimed invention, one of skilled in the art would have to first envision a combination of appropriate drug and a appropriate penetration enhancer and appropriate animal model system for one of the claimed combination and test the combination in the model system to determine whether or not the combination does not cause toxicity, irritation, allergy, precipitation and cease absorption. If unsuccessful, which is likely given the lack of significant guidance from the specification or prior art regard a formulation comprising a drug and a penetration enhancer with any drug with any penetration enhancer, one of skill in the art would have to then either envision a modification of the first combination of pharmaceutical compound, compound dosage, duration of treatment, route of administration, etc. and appropriate animal model system, or envision an entirely new combination of the above, and test the system again. If again unsuccessful, which is likely given the lack of significant guidance form the specification of prior art regarding a formulation comprising any drug with any penetration enhancer, the entire, unpredictable process would have to be repeated until successful. Therefore, it

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would require undue, unpredictable experimentation to practice the claimed invention to formulate a formulation comprising a drug and a penetration enhancer.

Therefore, a drug formulation comprising a drug in an amount effective to provide relief from disease or disorder of the breast in a pharmaceutically acceptable carrier capable of delivering the drug to the breast tissue, comprising a penetration enhancer to promote deliver of the drug across the stratum corneum, wherein the drug is not a non-steroidal anti-inflammatory or analgesic is not considered to be enabled by the instant specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicants' claiming limitation, wherein the drug is **not analgesic** in claim 1. However, dependent claims 6-8 claim hormones (i.e. danazol, bromocriptine, tamoxifen, antiestrogens) which are known to have an analgesic activity. (see Chan et al. The Hong Kong Practitioner Volume 21, December, 1999, page 573, page 274 right-hand side-page 577).

Therefore, these dependent claims contradict independent claim 1.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 4-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Mauvais-Jarvis et al. (U.S. Patent No. 4,919,937) of record evidenced by Oden (U.S. Patent No. 5,580,857).

Mauvais-Jarvis et al. teach **anti-estrogen drug** of 1-[4-(2-N-dimethylaminoethoxy)phenyl]-1(4-hydroxyphenyl)-2-phenylbut-1-(Z)-ene (also known as 4-hydroxytamoxifen) formulated in **aqueous alcoholic gel**. (abstract, claim 1).

Mauvais-Jarvis et al. teach that the drug can be administered percutaneously, **preferably topically** to a breast. (column 2, lines 29-32, column 3, lines 13-15, lines 52-57). Mauvais-Jarvis et al. observed that anti-estrogen drug, **4-hydroxytamoxifen**, in 60% strength **alcoholic solution** was applied on the skin overlying cancerous mammary tumors proved capable of passing through the cutaneous barrier and being taking up on the receptor molecules in these tumors. (column 2, lines 13-20).

Mauvais-Jarvis et al. teach that the anti-estrogen drug, **4-hydroxytamoxifen**, is useful for treating disease of the breast without harmful side effects. (column 3, lines 52-55).

Mauvais-Jarvis et al. illustrate the effective amount **4-hydroxytamoxifen** and **triethanolamine** (a penetration enhancer) utilized in a gel formulation. (column 3,

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table). Mauvais-Jarvis et al. (Jarvis) teaches that the anti-estrogen drug (4-hydroxytamoxifen) is applicable in the treatment of conditions of the breast, especially **benign (not cancer; not malignant)** and even cancerous conditions of the breast. (column 4, lines 37-40).

Oden teaches triethanolamine is a penetration enhancer. (column 7, lines 7-10).

Oden reference is provided as an extrinsic evidence show that triethanolamine utilized by Mauvais-Jarvis et al. is a penetration enhancer.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-4 and 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ragavan et al. (U.S. Patent No. 5,993,856) of record.

Ragavan et al. teach a micro or nanoparticulate drug formulation for topical administration comprising **danazole** or anticancer drug, anti-proliferative drug in an effective amount formulated in foams, suspension, solution, ointment and cream.

(abstract, claims particularly, claims 31-33, Examples 1-3, column 3, lines 10-15).

Ragavan et al. teach that **sorbitan esters** and **triethanolamine** (penetration enhancers) can be employed in the formulation. (column 4, lines 4-16). Ragavan et al. teaches that the microparticle **danazol** comprises 10mg/day, 25mg/day, 50mg/day. (Example 3). These dosages are within and/or overlap Applicant's preferred danazol dosage range in the specification on page 9, under dosage. Ragavan et al. illustrate

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1mg gel formulation comprising microparticulate formulation of danazol in Examples 1 and 2. Ragavan et al. illustrate that danazole concentrations of 1mg/300g rat were administered and danazol concentrations of 100mg /50kg were administered to women. (table 1). These dosages are within Applicant's dosage range of danazol in the specification page 9. Ragavan et al. Teach that the formulation provides significantly diminished side effects with increased bioavailability and comfort. (column 3, lines 15-20).

Ragavan et al. do not illustrate the danazole formulation with triethanolamine or sorbitan esters, the formulation providing relief from disease or disorders of the breast and the property of the carrier capable of delivering the drug to the breast tissue and to promote delivery of the drug across the stratum corneum.

It would have been obvious to one of ordinary skill in the art to formulate danazole with standard excipients such as triethanolamine or sorbitan esters because Ragan et al. teach that these excipients are routinely employed with danazole and they are well known standard excipients. One of ordinary skill in the art would have been motivated to employ any one of standard excipients of danazole formulation taught by Ragavan et al. with a reasonable expectation of successfully formulating danazole formulation providing significantly diminished side effects with increased availability and comfort as taught by Ragan et al. Applicants' recitation in claims 1 of an intended use of treating benign diseases of the breast and to relief from disease or disorders of the breast do not represent a patentable limitation since such fails to impart any physical limitation to the composition since the prior teaches same formulation comprising the

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same active agent with the same “effective amount” as claimed by Applicants. Further, the limitation of the carrier “capable” of delivering the drug for the breast tissue, it is noted that the carriers or excipients employed by Ragan et al. is the same “penetration enhancer” as required by claim 1. Therefore, the same compounds cannot have mutually exclusive properties. Accordingly, the same penetration enhancer taught by Ragan et al. would be “capable” of delivering the drug for the breast tissue and promote delivery of the drug across the stratum corneum upon the contact with skin during an administration step.

For these reasons the claimed subject matter is deemed to fail to patentably distinguish over the state of the art as represented by the cited references. The claims are therefore properly rejected under 35 U.S.C. 103.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

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F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15 and 31-33 of U.S. Patent No. 5,993,856. Although the conflicting claims are not identical, they are not patentably distinct from each other because it encompasses same subject matter. The claims in patent teach a micro or nanoparticulate drug formulation for topical administration comprising danazole or anticancer drug, anti-proliferative drug in an effective amount formulated in foams, tablets and creams and same "effective amounts" of treating a diseases or disorder in a regions overlap with instantly claimed "effective amounts" to provide relief from disease or disorders of the breast.

Claims 1-8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 and 17 of U.S. Patent No. 6,652,874 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because it encompasses same subject matter. The claims in patent teach a drug formulation comprising the drug selected from the group consisting of anticancer drugs, cytotherapeutic drugs, anti-proliferative drugs, and antiviral drugs formulated in micro or naoparticulates with same "effective amounts" of treating a

diseases or disorder in a regions overlap with instantly claimed “effective amounts” to provide relief from disease or disorders of the breast. (see example 3, and instant dosage range in the specification on page 9).

Claims 1-8 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-3 and 12 of U.S. Patent No. 6,416,778 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because it encompasses same subject matter. The claims in patent teach a drug formulation including liquid suspension, hydrogel or topical ointment or a cream comprising the drug particles danazole for regional administration of an effective amount to provide relief from symptoms of a disease or disorder with same “effective amounts” of treating a diseases or disorder in a regions overlap with instantly claimed “effective amounts” to provide relief from disease or disorders of the breast. (see example 3, and instant dosage range in the specification on page 9).

Response to Arguments

Applicant's arguments filed March 6, 2008 have been fully considered but they are not persuasive. With regard to 35 U.S.C. 112, first paragraph rejection, Applicants argue that the examiner has provided no basis for the rejection other than an allegation that the claims are broad. This is not found persuasive because the rejection formulated with consideration based on all the Wands factors. (see Final rejection).

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While the state of the art is relatively high with a formulation comprising a specific drug and a specific penetration enhancer (e.g. 4-hydroxytamoxifen and triethanolamine), the state of the art with regard to a formulation comprising a drug with a penetration enhancer is underdeveloped. The cited Reed reference teaches that there is problem with most known dermal penetration enhancers that they are often toxic, irritating allergenic. Reed further teaches that these difficulties remain with those dermal enhancers because the problem of irritation at the site of application has not been overcome. Reed further teaches some of enhancers are that are toxic and unsuitable for application for the animal body. Moreover, Reed teaches that the thermodynamic activity of a drug with vehicles can cause precipitation causing ceases percutaneous absorption. To the extent that instant claims drawn to a drug formulation comprising any drug with any penetration enhancer to promote delivery of the drug across the stratum corneum, which is highly speculative, a great amount of evidence is required to show its operability on actual loci in human. Applicants' argue that it is well within the abilities of one of skill in the art to select a drug and a penetration enhancer as exemplified for danazol and 5% oleyl alcohol, in order to make the claimed formulation. This is not persuasive because Applicants' example comprising a single drug (i.e. danazol) with a penetration enhancer does not enable all drugs with all penetration enhancer. Given the fact that the most known dermal penetration enhancers are taught to be problematic as being toxic, irritating allergenic, and the difficulties remain with those dermal enhancers because of the problem of irritation at the site of application

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has not been overcome, the scope enablement made in the previous Office Action is deemed proper.

With regard to 35 U.S.C. 102 rejection, Applicants argue that Jarvis disclosed the treatment of breast cancer comprising administering an anti-estrogen drug which is derived from tamoxifen. However, the claims have been amended to clearly exclude delivery of drugs for treatment of breast cancer, by incorporating the limitation of claim 9 and 16 into claims 1 and 10, wherein the disease is benign (not cancer, not malignant). This is not found persuasive because Applicants attention is drawn to the abstract, wherein Mauvais-Jarvis et al. (Jarvis) teaches that the anti-estrogen drug (4-hydroxytamoxifen) is applicable in the treatment of conditions of the breast, especially benign (not cancer; not malignant) and even cancerous conditions of the breast. (column 4, lines 37-40). Therefore, this reference clearly anticipates the currently amended treatment of "benign" (not cancer; not malignant) conditions of the breast. Applicants argue that Applicants are unclear as to the Examiner's reason for concluding that triethanolamine is employed as a penetration enhancer in Jarvis, considering the numerous other applications for the compound because there is nothing in Jarvis that supports such a conclusion. This is not found persuasive because Jarvis teaches that the drug can be administered percutaneously preferably topically to a breast. (column 2, lines 29-32, column 3, lines 13-15, lines 52-57). One of ordinary skill in the art would immediately envision that triethanolamine employed by Jarvis is a penetration enhancer because Jarvis teaches the topical administration via percutaneously absorption to a

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breast as a preferred route. Further, triethanolamine is a well known penetration enhancer as evidenced by Oden reference. Therefore, the rejection stands.

With regard to 103 rejection, Applicants argue that the examiner's conclusion of obviousness is based upon improper hindsight reasoning. This is not persuasive because it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Applicants argue that Ragaven1 (U.S. Patent No. 5,993,856) is silent about including penetration enhancers in the formulation. This is not found persuasive because Ragavan 1 clearly teaches the utilization of triethanolamine or sorbitan esters with danazol. (column 3, lines 25-37). As indicated above, the triethanolamine is a well known penetration enhancer as evidenced by Oden reference. Applicants argue that "Region" is defined in Ragavan 1 as reproductive organs and their surrounding environs, which include uterus, fallopian tube, peritoneal space, pelvic cul-de-sac, ovaries, perineum and the rectovaginal region, therefore, formulation disclosed in Ragavan 1 are meant for delivery across mucosal membranes. This is not found persuasive because Applicants are reminded that the instant claims are drawn to a "drug formulation". Applicants' recitation of the intended use of promoting delivery of the drug across the stratum corneum must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed

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invention from the prior art. If the prior art structure is capable of performing the intended delivery, then it meets the claim. In this case, Ragavan 1 teaches the same active agent (danazol), the same penetration enhancer (e.g. triethanolamine) and the same "amount effective to provide relief from benign diseases or disorder". Therefore, Ragavan1's formulation would have the same functional characteristics such as promoting delivery of the drug across the stratum corneum. Applicants argue that Alginic acid is widely used as a disintegrant promoting rapid breakdown of tablets to rapidly release the active agent but the same agent at higher concentration is employed to delay release of active agent from formulation which is the exact opposite effect obtained with a disintegrant. This is not found persuasive because alginic acid and its properties are not at issue. The issue is that compound, triethanolamine utilized in Ragavan 1 is "a penetration enhancer" as required by instant claims.

With regard to Double Patenting Rejection, Applicants argue that the instant claims differ with Claims of Ragavan 1, Ragavan 2 and Ragavan 3: in drug to be delivered; in region to be treated; need for excipient; for treatment of different disorders. This is not found persuasive because the drug to be delivered is obvious variation of one another because reproductive disorder includes breast disorder as breast is well known reproductive organ); the region to be treated is obvious variation because the patented claims drawn to the regions of reproductive organ would obviously encompass breast region; need or excipient is obvious variation because a penetration enhancer itself is an excipient. Thus, the claims fail to patentably distinguish over the state of the art as represented by the cited references.

None of the claims are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Kim whose telephone number is 571-272-0628. The examiner can normally be reached on Monday through Friday 6:30 am to 3 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreenivasan Padmanabhan can be reached on 571-272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Jennifer Kim/
Primary Examiner, Art Unit 1617

Jmk
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